

REDUCED SWING CHARGE RECYCLING CIRCUIT
ARRANGEMENT AND ADDER INCLUDING THE SAME

ABSTRACT OF THE DISCLOSURE

5 A circuit arrangement uses differential pass
transistor logic, a low voltage swing and charge
recycling to save power, in which the swing voltage
is reduced, but the supply voltage is not reduced,
thereby maintaining the transistor device current and
avoiding speed degradation. SOI devices including an
adder, which uses this circuit arrangement, can avoid
the body effect to long pass transistor network and
10 improve the speed at lower supply voltage.